

Flight Scientist Report
Monday 06/13/2022 ACTIVATE RF175

Flight Type: Statistical Survey Flight
Flight Route:
Special Notes: CALIPSO underflight

King Air

Pilot report (Coldsnow):

Flight was planned as a CALIPSO overpass flight at 345pm AST. Flight path planned was BORNW WUHO PEETS BDA 313556N0642300W 283457N0633510W 313556N0642300W 330414N0644714W 313556N0642300W 3215N06500W BEEBB TXKF. However, a change airborne extended the track northbound to 333659N0645524W and removed the return to 313556N0642300W. Instead from 333659N0645524W we proceeded direct to 3215N06500W. Outbound the king air got up to a 0.5 NM of centerline of point 313556N0642300W. This was corrected as soon as realized. Approaching abeam Bermuda, the king air descended to FL245 due to cirrus at altitude. The king air also turned early at 333659N0645524W to avoid cirrus at FL245. This early turn put the king air more than 10 min in front. A 360 was executed to help the Falcon close the gap. All other timing was within 10 mins. Five dropsondes were released (4 on CALIPSO track and one at the spiral). All were nominal. Winds at altitude were light and variable (<10 knots).

Flight scientist report (Shingler):

TXKF BORNW WUHO PEETS BDA 313556N0642300W 283457N0633510W 313556N0642300W 333659N0645624W 283457N0633510W TXKF

The CALIPSO line was run SSE where there were scattered shallow cu along the line and a fair bit of noted Type B cu. There was some cirrus near the end of the track. The CALIPSO overpass was hit on the way back and free of cirrus. The north end of the CALIPSO track had cirrus present and the UC12 descended down to 24.5kft to try to stay under it. A Tudor Hill spiral overpass was completed after the CALIPSO track was completed. 5 sondes were dropped on this flight

SONDES

3x along CALIPSO leg (south of Bermuda)

1x along CALIPSO leg (north of Bermuda)

1x at Tudor Hill Spiral

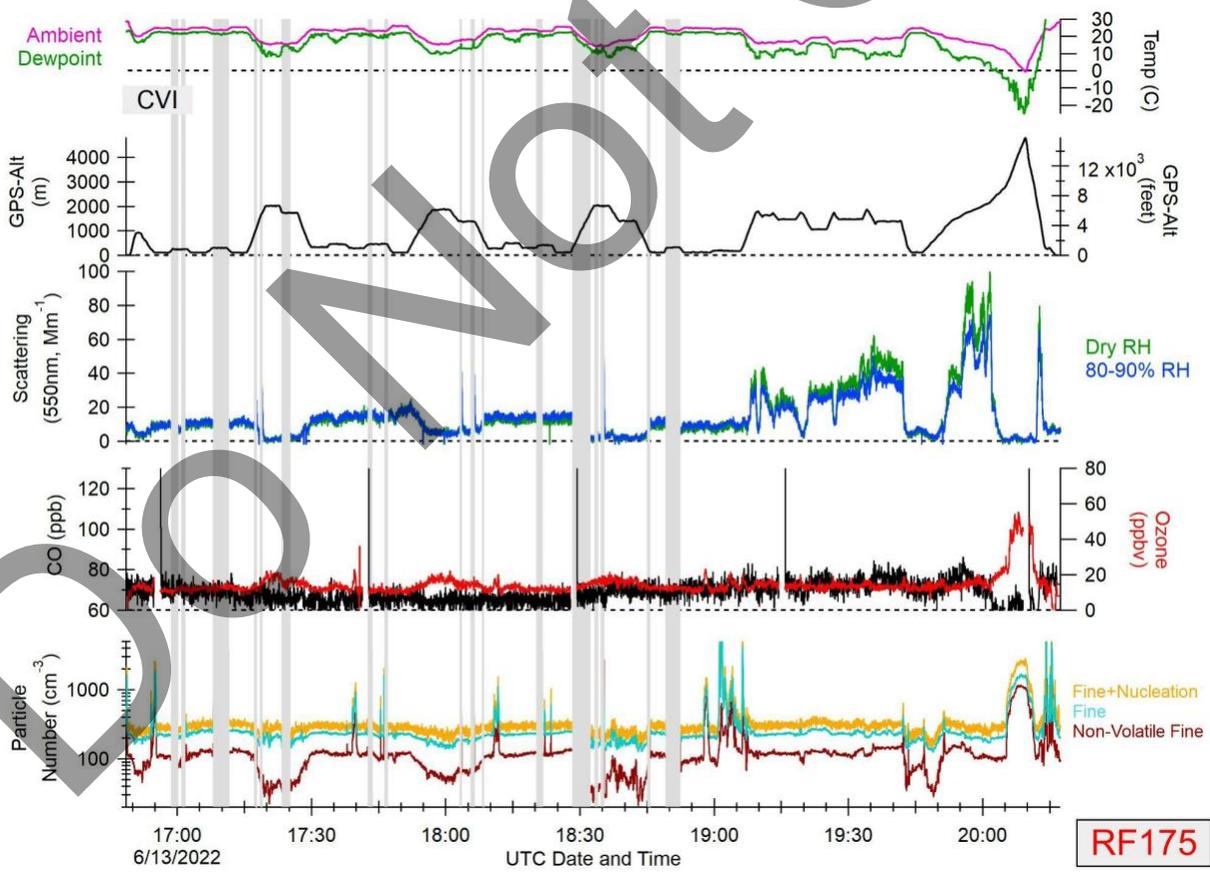
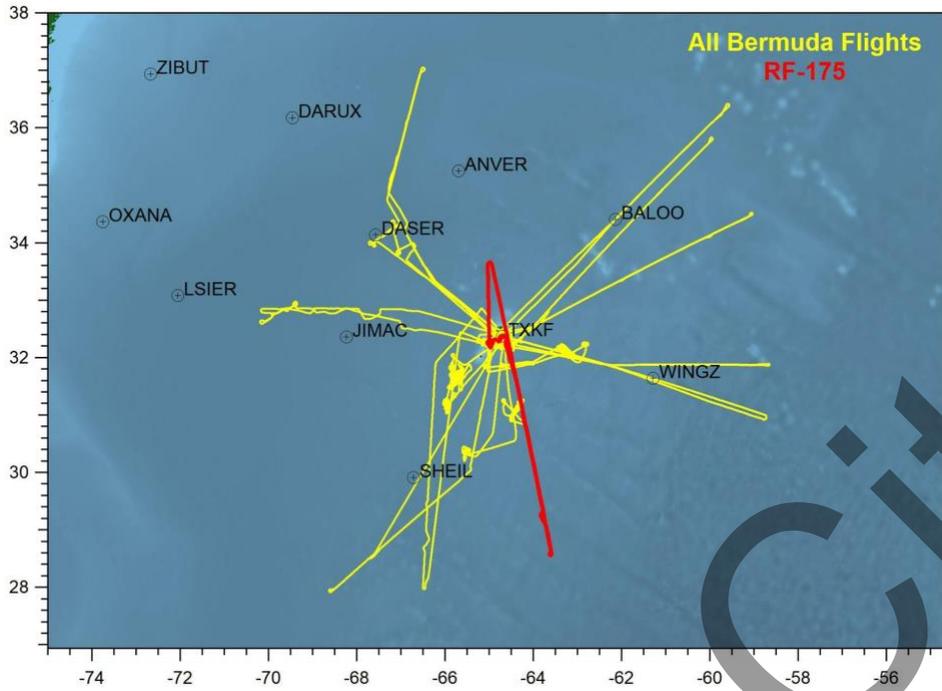
Falcon

Pilot report (Baxley):

ACTIVATE coordinated flight with HU-25 and UC-12; Elder/Baxley, Crosbie/Winstead Process study with central point 333659N/0645624W, spiral at 3304.23N/06447.23W Flight flown as briefed, no anomalies noted.

Flight scientist report ():

Do Not Cite!

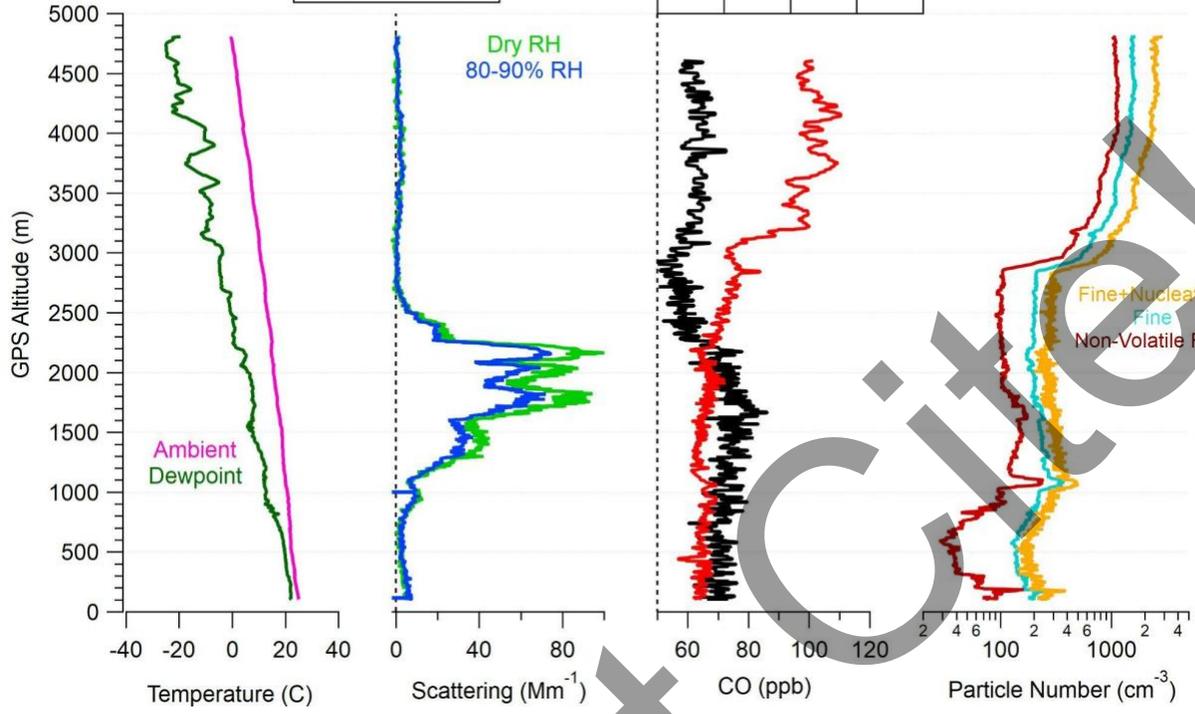


Tudor Hill Spiral

6/13/2022
19:46 - 20:09 UTC

Ozone (ppbv)
0 20 40 60 80

RF175



Do Not Cite!

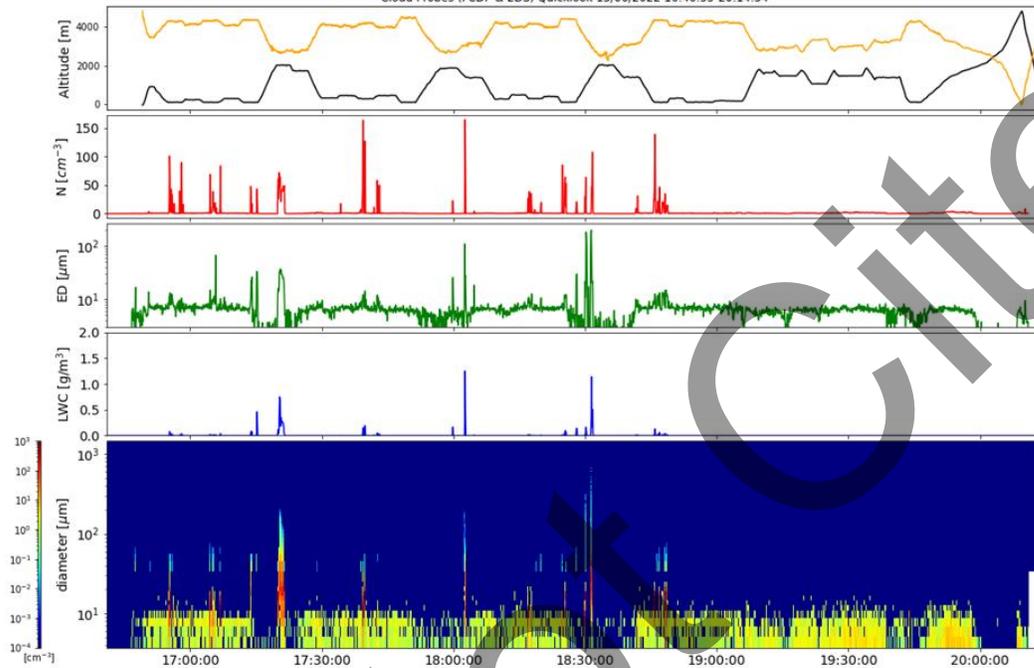
Quicklook ACTIVATE Cloud Probes (FCDP & 2DS) Quicklook

preliminary data, only for quicklook use

Simon Kirschler, Christiane Voigt, Richard Moore, Ewan Crosbie



Cloud Probes (FCDP & 2DS) Quicklook 13/06/2022 16:40:55-20:14:34

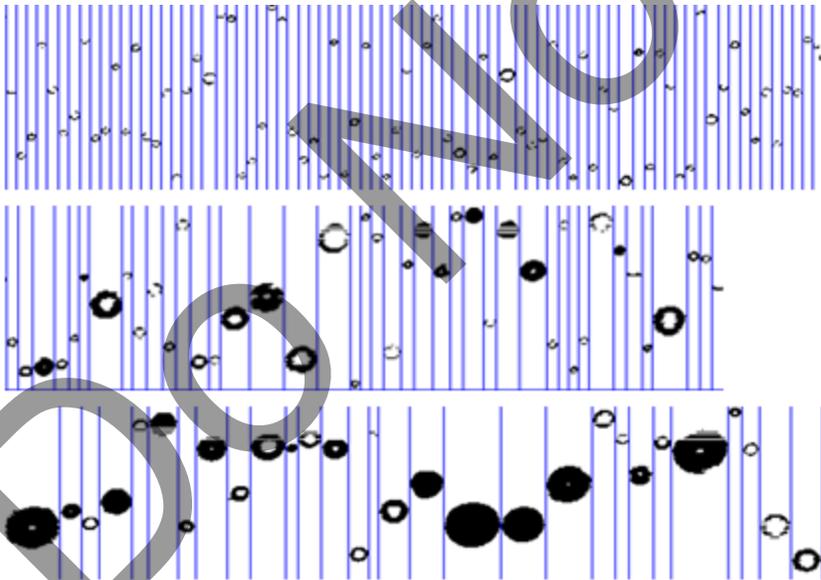
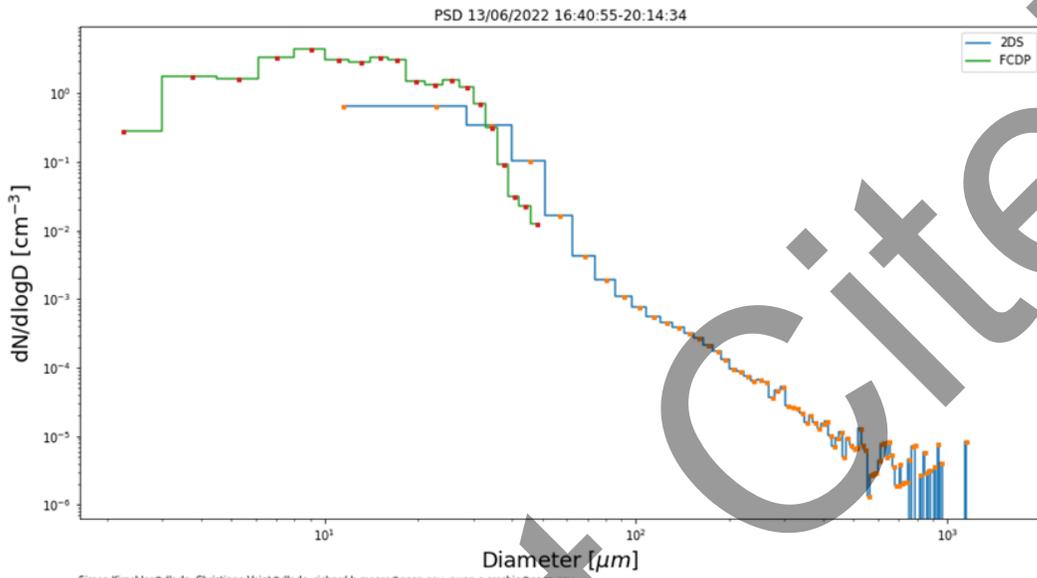


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Do Not Cite!

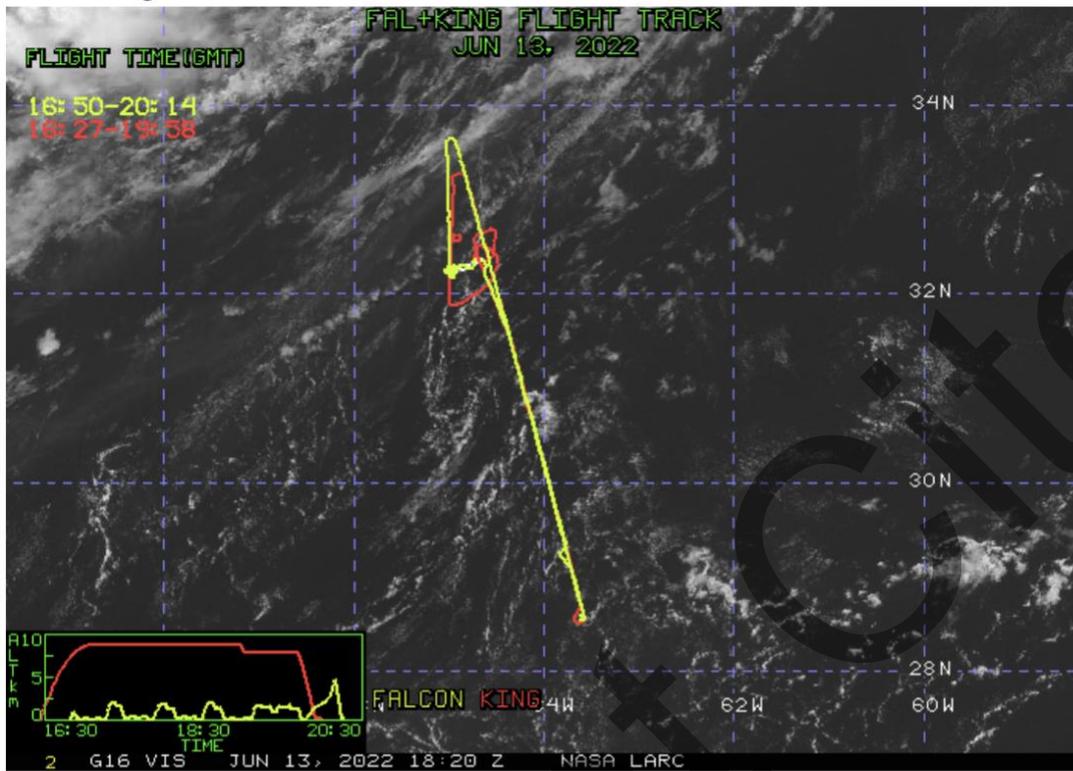
PSD ACTIVATE

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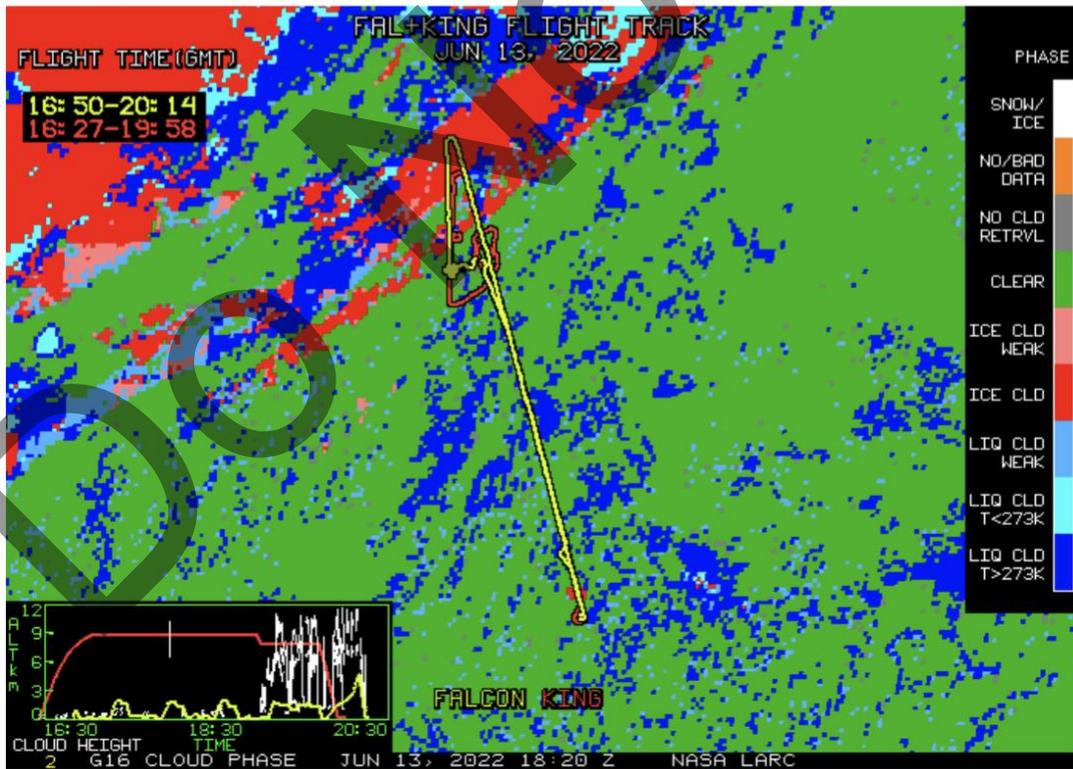


Only pure liquid clouds with Precip.

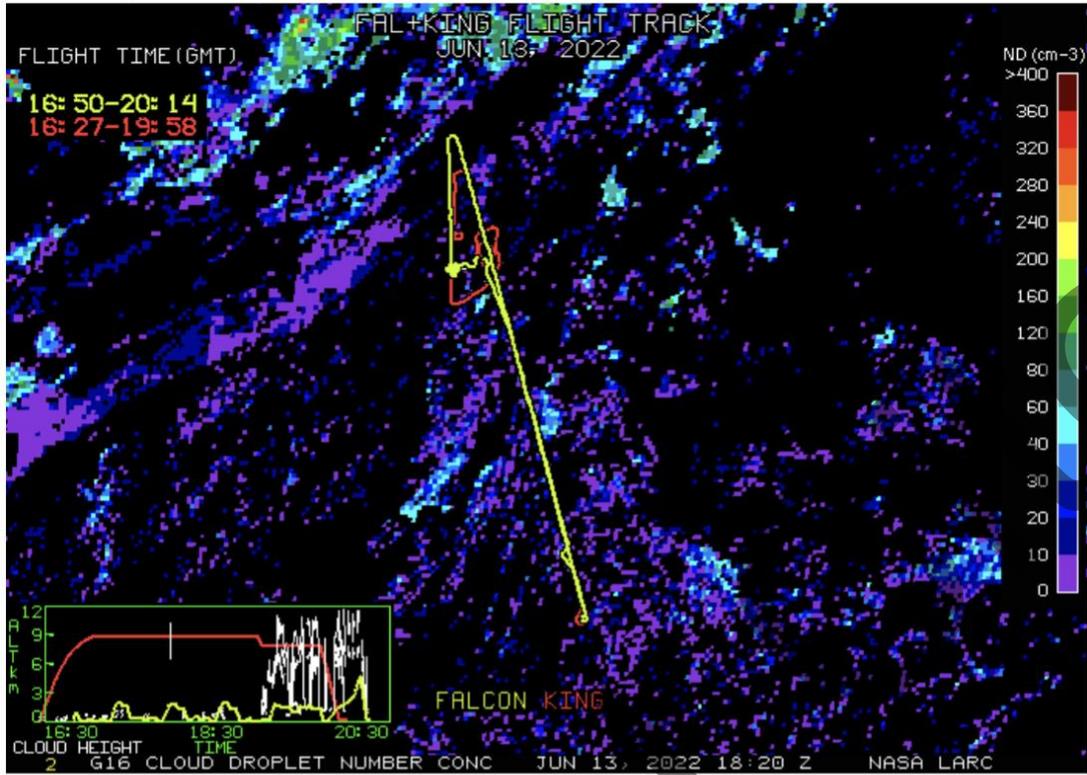
NASA-LaRC Clouds Group GOES-16 Quicklook Images for Flight 175, 18:20 UTC Jun 13, 2022
Visible Image



Cloud Phase



Cloud Droplet Number Concentration (cm-3)



Cloud-Top Height (Kft-ASL)

